Report of The Mayor's Health Care Commission to Mayor Thomas M. Menino

March 7, 1994

James W. Segel, Chairman
Hale and Dorr

Deloitte & Touche

The Pell Group, Inc.

Submitted to
Mayor Thomas M. Menino
on behalf of
The Mayor's Health Care Commission

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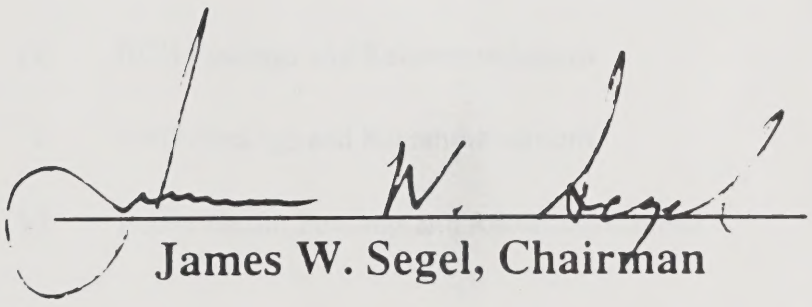

James W. Segel, Chairman

Report of
The Mayor's Health Care Commission

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I. Commission Background and Objectives

The Mayor's Health Care Commission was established in the summer of 1992 to address the following three issues

- Identify existing health care needs of the population that Boston City Hospital (BCH) is committed to serve and develop strategies to ensure the Hospital's long term operational and financial viability for meeting the future health needs of this population

- Recommend the appropriate roles and relationships, both programmatic and financial, among community health centers (CHCs), private teaching hospitals and the Department of Health and Hospitals in addressing the issues of improving public health and providing access to primary care.

- Develop a model for the health care delivery system including consideration of changes at the state level, emerging patterns being articulated in national health care reform proposals; and other pioneering models under development

The Commission was chaired by James W Segel, Esq., an attorney from Hale and Dorr, and had fifteen members representing the Boston community health centers, private teaching hospitals, Department of Health and Hospitals, other city departments, Boston University Medical School and community organizations For the first two months of its operation, the Commission was chaired by Thomas P Glynn The Commission was originally established with a two year time frame The City of Boston and the Conference of Boston Teaching Hospitals (COBTH) contributed equally to a budget of $760,000. The Commission completed its work six months early and approximately $280,000 under budget.

The Mayor's Health Care Commission was significantly assisted in its efforts by a consulting team led by Deloitte & Touche and including The Pell Group, Inc. Over the past eighteen months, the Commission and the consulting team met regularly to study the changing health care environment, the public health and primary care needs of the city, the challenges faced by Boston City Hospital and the community health centers, and the role of the private teaching hospitals in the delivery of primary care. This report summarizes the Commission's findings and recommendations.

II. Recommendations

The recommendations in this report reflect the Commission's view that dramatic change is necessary for Boston City Hospital to survive in the increasingly competitive Boston health care market. Since its founding in 1864, Boston City Hospital has been dedicated to meeting the health care needs of the people of the city, particularly the poor and underserved who might not otherwise be able to have good medical care. BCH's mission of providing health care to high risk and vulnerable populations is no less important today than it was one hundred and thirty years ago. The hospital provides a unique array of services that go beyond strict medical care to address social problems of poverty, violence, and substance abuse. In providing these services, it also strives to break down the cultural and language barriers that may inhibit patients from seeking or receiving the care they need. However, recent trends in the health care industry require major changes in order for BCH to continue to sustain that mission. BCH must reduce its costs, improve its public image, and strengthen relationships with other health care providers. This report includes recommendations designed to best position BCH to implement those changes.

Recent changes in the health care environment are also having a significant impact on the twenty-five (25) Boston community health centers. The community health centers play a major role in the delivery of health care to the poor and underserved in Boston. Recent trends, however, require them to develop the systems necessary to operate in a much more demanding health care environment and to build partnerships with other health centers and with hospitals in order to maintain and expand their role in delivering primary care and prevention services to the neighborhoods of the city.

Despite the high volume and quality of public and private health care resources available in the city of Boston, the health status of many of the city's neighborhoods remains alarmingly poor. Many factors beyond the health care system itself contribute to poor health status including poverty, violence and lack of access to health insurance. However, it is the Commission's recommendation that collaborative efforts be intensified among health care providers, purchasers and consumers to continue to analyze the particular health care needs of Boston and to ensure that resources are best targeted to address them.

The Commission makes the following recommendations.

I. Boston City Hospital (BCH) must continue to strengthen its role as an urban safety net hospital, dedicated to providing high quality services to meet the health care needs of all residents of Boston, regardless of their ability to pay.

II. There should be a fundamental change in the governance structure of Boston City Hospital. The governance structure should be converted to that of either a public authority, public benefit corporation or non-profit corporation.

A. The change in governance structure should begin immediately in order to facilitate an increase in BCH's operating efficiency and to allow it to meet the challenges of the changing health care marketplace

B. The change in governance structure must be designed to assure BCH's continued special treatment under Medicaid and other reimbursement programs

C. The change in governance should be designed to allow for the development of formal affiliations with other institutions as described in Recommendation VI

III. The City of Boston's financial support to Boston City Hospital must be continued through a contract for medical services for the underserved

A. For the first five years of operation under a new governance structure, the contractual support should be set at least at the level of unreimbursed costs currently projected to be incurred by BCH under its present form of governance

B. After the first five years, the annual contractual support should be re-evaluated in light of the impact of state and federal health reform and universal access. To the extent that there are still underserved populations, the subsidy should be determined based upon such criteria as
   - Per capita payments for uninsured persons where feasible
   - Per encounter payments based upon revenue shortfalls for an "efficient provider"
   - Specific payments for unique "safety net" services - e.g.
     - » MD Fee subsidy
     - » Social work services
     - » Translator service
     - » Trauma service

C. The City of Boston should contract with BCH to provide the Emergency Medical Services as long as the reimbursement advantages of such an arrangement persist.

IV. In order to encourage community health centers and community health center networks to join Boston City Hospital's primary care network, the following steps should be taken:

A. Community health centers which operate under BCH's license should be required to participate in BCH's primary care network through formal contracts which identify the specific obligations of all parties.

B City of Boston investments, such as capital funds, should be targeted to community health centers that join the BCH network

V In addition to annual contractual support, Boston City Hospital requires a one-time investment fund Estimates for this range from $20 to $25 million Federal, state, city, private and foundation sources should be sources for this fund

Examples of uses of this fund include

- development of an expanded primary care network
  - » investing in community health centers (CHC and hiring physicians)
- operations re-engineering
- development of information systems
- other facility improvements (e g., parking space and Ambulatory Care Center renovations)

VI Boston City Hospital should enter into negotiations toward full integration with Boston University Medical Center (BUMC)

- This should be pursued simultaneously with efforts to change the governance of BCH

- Among issues to be negotiated:
  - Size and structure of the annual city contract
  - Responsibility for BCH debt
  - Investment in primary care network within Boston
  - On-going commitment to the underserved of Boston
  - Specifics of corporate structure (e.g. does BCH remain a separate corporation with a holding company or are the corporations merged)
  - Opportunities to combine services
  - Opportunities for cost reductions
  - Research and education

VII. Boston community health centers should be encouraged to pursue horizontal integration strategies

- In order to increase their future viability, CHCs should form organizations or networks with at least 100,000 to 120,000 visits annually

- Combining several individual health center organizations will enhance their ability to
  - Preserve their mission
  - Recruit and retain management staff and primary care providers
  - Acquire and utilize management information systems
  - Raise capital for facility improvements
  - Capture available economies of scale
  - Negotiate with health plans and hospitals

VIII. The Boston teaching hospitals and community health centers should be encouraged to create vertically integrated health delivery systems

- By joining an integrated delivery system, CHCs will enhance their access to capital and managed care contracts and expertise

- By investing in CHCs, hospitals can strengthen their primary care base and contribute to the health needs of the community

- When joining an integrated delivery system, the CHCs must be assured that they will be able to sustain their mission

- Specific alignments and arrangements between hospitals and CHCs should be determined by free-market negotiations. Areas of negotiation should include:
  - Governance structure and board representation
  - Specific guaranteed levels of investment (capital improvements, operating subsidies, information systems, physician support, managerial support, etc.)
  - Methods of evaluating performance across the network
  - Discussions of the financial status and future strategy of both organizations

IX. Accountability for the public health functions currently within the Department of Health and Hospitals should be retained as the responsibility of Boston City Government. Public Health programs presently conducted by the Department of Health and Hospitals should be individually evaluated to determine whether they remain within city government or are transferred to the authority/public benefit corporation/not-for-profit organization recommended for Boston City Hospital. The implications of both options should be analyzed. The decision will be determined based on which option assures the maximum benefit and services for the residents of Boston and the people served by its health system.

X. The Public Health Department should establish funding priorities which reflect the neighborhood health status and:

- Leverage the resources of state, federal, foundation and other private programs
- Foster cooperative efforts which draw upon the expertise and resources in Boston hospitals and community providers
- Measure and reward performance by public health providers and networks

XI A Boston Health Planning Committee should be established by the proposed Mayor's Cabinet Office of Health and Human Services to increase coordination and monitor progress of efforts to improve the health status of Boston residents

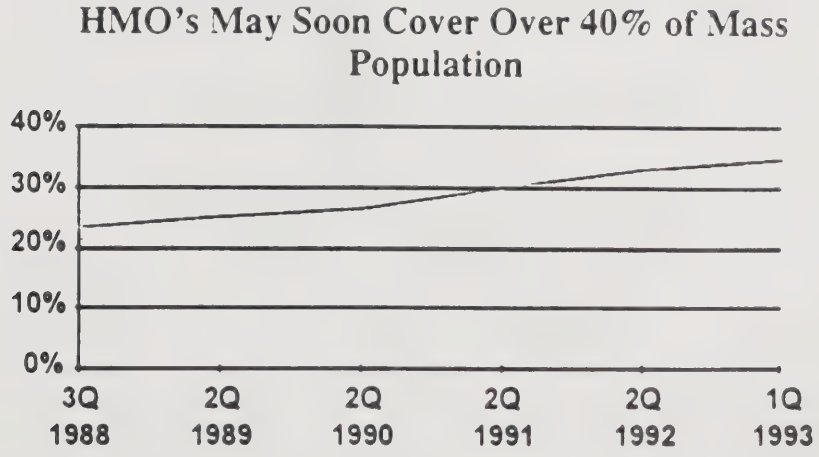
- The Committee should be structured to facilitate a sustained collaborative focus on the major health needs of Boston residents and to encourage ongoing coordination among providers and funding sources in addressing those needs
- The Committee's membership should include representatives of hospitals, medical schools, CHCs, health plans, other community organizations, consumers, public health departments, and foundations

III. Environmental Changes

The health care delivery system is undergoing fundamental changes The Commission attempted to identify key market trends and anticipate the further market evolution in order to develop recommendations that best position Boston City Hospital and the community health centers for the future

The key trends identified by the Commission are

- **The growth in managed care plans.** Managed care plans now cover over 50% of all Massachusetts residents Health Maintenance Organizations (HMOs) insure 38% of the population, the highest penetration of any state in the country Preferred Provider Organizations cover another 12%. The state Medicaid program, which insures almost 10% of the population, currently enrolls some recipients into HMOs and is developing managed care strategies for the remainder The most prominent Medicaid strategy is the Primary Care Clinician Program in which each recipient chooses a primary care provider who must then approve referrals for specialized care, ancillary services, and inpatient admissions The state is committed to expanding the use of managed care approaches in controlling the cost of care. The growth in managed care plans remains high. Clearly, managed care plans will dominate the future health care system in Massachusetts



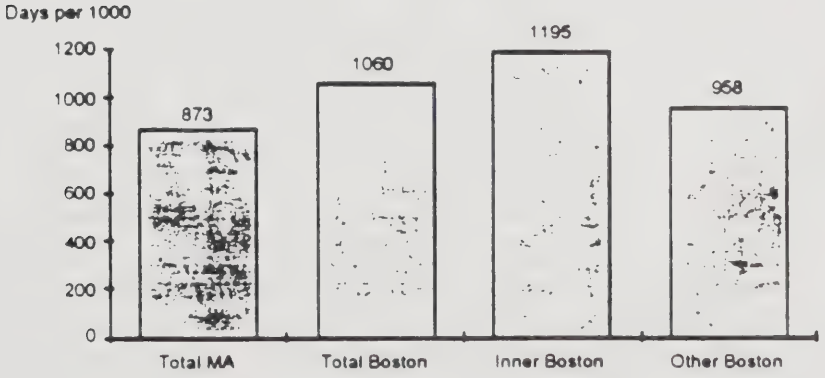
- **The decline in inpatient utilization.** From 1983 to 1991, hospital inpatient utilization declined among residents of Massachusetts by 27%. This decline shows no sign of abating. The inpatient utilization for Boston residents was 1060 inpatient days per thousand residents in 1991. Statewide, there were 873 inpatient days per thousand. These rates are substantially higher than those for HMO patients in Massachusetts or for other parts of the country with high HMO penetration. The corresponding age adjusted utilization for Massachusetts residents in HMOs is less than 600 days per thousand. The population-wide utilization rates are nearing 600 days per thousand in California and the Minneapolis/Saint Paul area and are still declining. These two markets have been dominated by managed care plans for several years.

Inpatient Utilization Has Declined Dramatically

- MA inpatient utilization has declined 27% since 1983
- PPS, managed care and medical practice have contributed to this trend

Source: Universal Healthcare Almanac - using AHA Hospitals Statistics

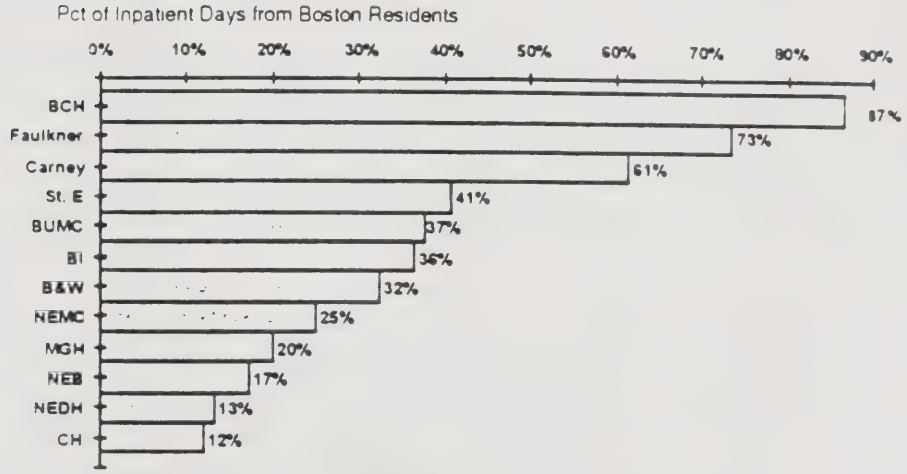
Utilization in Boston is Higher than MA Average



- Inner Boston includes Dorchester, Mattapan, South Boston, Roxbury, & South End Zip Codes - BCH Primary Service Area

The decline in inpatient utilization in Massachusetts is likely to continue until the inpatient utilization rate approaches the levels achieved in California and Minneapolis. Given that inpatient utilization among Boston residents is higher than the rest of the state, the decrease in Boston may be particularly dramatic. As a result, the occupancy of Boston hospitals could easily decline to approximately 50% of current capacity. Since BCH is more reliant on Boston residents for its patient days, the impact on BCH could be even more significant than at some of the other hospitals.

Inpatient Dependence on Boston Residents



Hospitals with greater dependence on Boston residents - particularly Inner Boston residents - may be more vulnerable to declines in census

- **The dominance of prospective payment methods**. Throughout the 1980's both governmental and private payors shifted from charge based or cost based reimbursement methods for hospitals, clinics and physicians to prospective methods such as per Diagnostic Related Group (DRG), per diem or per encounter payment rates. With more prospective payment approaches, the opportunities for shifting costs by increasing charges to the charge based payors are declining. Increasingly, these rates are based upon industry wide averages and not hospital specific costs. Consequently, higher cost institutions, such as BCH, are facing increasing pressure. Lastly, the annual increases in these rates are typically limited to the Consumer Price Index or to an index which is more clearly related to medical price inflation. In the case of governmental insurance programs such as Medicare, the annual adjustment is usually less than inflation.

These trends will produce substantial changes in the marketplace

- **Hospitals will face substantial financial pressures** Despite efforts to retain and increase volume, most hospitals will share in the overall decline of both patient days and discharges. Efforts to compensate for a volume driven decline in patient revenues by increasing charges will become less effective as prospective payment methods dominate. Price competition will further reduce hospital revenues. Since a substantial portion of a hospital's costs is fixed, at least in the short run, hospital managers are likely to accept pricing arrangements with HMOs and PPOs below their average costs. While many Boston hospitals are in strong financial positions today, they are facing several challenging years ahead -- at least until the excess hospital capacity is eliminated through downsizing or facility closures

- **Primary care providers will become increasingly important** Primary care providers are usually defined as general internal medicine, family practice, and pediatric specialties. Often obstetrics/gynecology specialists are also considered primary care providers. Within managed care plans, primary care providers play a critical role in managing and coordinating the care of patients.

  Increasing penetration of managed care has led to increased demand for primary care physicians and rapidly increasing salaries for primary care providers. Starting salaries that recently were as low as $60,000 to $70,000 for general practitioners are now well above $100,000. Organizations purchasing primary care physician practices are often paying between $200,000 and $300,000 per physician

  Under a capitation based payment methodology, higher salaries compensate primary care physicians for both the services they provide and the unnecessary services they avoid through their case management services. Within the fee-for-service structure, it is more difficult to compensate a primary care provider for these case management services. As noted above, annual adjustments to fee-for-service payments rarely exceed inflation. Providers who remain predominantly dependent on fee-for-service contracts will incur increasing costs of matching the salary increases of primary care providers without a similarly increasing source of revenue. Consequently, primary care providers, including the community health centers, face increasing financial pressure to accept and develop the capability to manage capitation contracts.

- **Health care providers will form vertically integrated delivery systems.** These systems will include primary care providers, specialists, hospitals, home care services and a variety of allied health professionals These systems may provide health care services though a contract with established insurance companies or may offer services and health insurance directly to consumers

  Currently, the majority of health care providers are organizationally and financially independent. Referral relationships among providers are ad-hoc and informal. Most providers have contracts with many insurance companies and managed care plans. Group and staff model HMOs such as Harvard Community Health Plan and Fallon Community Health Plan currently have vertically integrated provider delivery systems While delivery systems of independent health care providers prospered under the fee for service systems of the past, the growth of managed care will drive the development of vertically integrated delivery systems

When health plans enter a marketplace, they typically establish broad and non-exclusive provider networks. Most physicians and hospitals obtain contracts with many health plans and rarely does an individual health plan account for more than a small portion of a provider's volume. The primary competition for these HMOs and PPOs has historically been traditional indemnity insurance plans As the penetration of HMOs and PPOs increases, they begin to compete against other managed care plans Consequently, their emphasis on cost control increases, and they begin to bargain with providers more aggressively Health plans look to lower their cost by obtaining discounts in what they pay providers and reduce their risk through such mechanisms as capitated payments. In return for discounts and assuming greater risk, hospitals and other providers demand a greater share of patient referrals. In order to accommodate these demands, health plans begin to concentrate their patient care into an increasingly exclusive network of providers.

As hospitals and providers face increasing pressure from declining real rates of payment, more will consider accepting greater risk. By accepting capitation contracts, providers fully accept the risks of managing the care of patients. In order to manage the cost of care, the providers must form an integrated delivery network that has the following characteristics:

- Sufficient primary care. Primary care clinicians provide a key case management and/or gatekeeper role in managed care. The current mix of primary care physicians and specialists in the United States is approximately 30% primary care, 70% specialists. Under managed care, the mix is closer to 50/50. Sponsors of an integrated delivery system must invest in building a primary care base.

- Shared information systems In order to manage the care of patients, the network must develop a capability to consolidate and share information across all providers within the system Without a shared information system, communication and coordination is extremely difficult, costly, and less effective

- Aligned incentives All major participants in the network must work together to manage care. When the incentives are in conflict, the results are diminished If the hospital has an incentive to keep patients in the hospital longer and the physician has an incentive to reduce patient length of stay, the hospital might do less to assist the physician in locating alternative forms of care. When both share the incentive to reduce length of stay, they work as a team to locate the most appropriate and lower cost alternatives

Creating such an integrated delivery network is difficult and requires significant investment. However, forming a network can make the providers far more attractive to managed care plans. Not only does a capitation contract transfer risk from the health plan to the providers, contracting with an integrated delivery system simplifies health plan administration. A contract with one integrated delivery system can replace hundreds of contracts with hospitals and physicians Health plans' claims processing and utilization management bureaucracies can often be reduced or eliminated For these reasons, many managed care plans will prefer contracting with hospitals and providers that join together as an integrated delivery network While individual providers may prefer to avoid accepting risk, avoiding capitation contracts may result in losses in market share and disproportionate reductions in patient volume

The development of these networks are evident nationally -- particularly in Minneapolis and California. The following are local examples of network development activity

- The purchase of physician group practices by the Lahey Clinic and Blue Cross
- The formation of large primary care group practices such as the one recently announced in the Western Metropolitan Area of Boston.
- The establishment of affiliation arrangements between Boston teaching hospitals and community hospitals such as the relationship between New England Deaconess Hospital and the Nashoba Valley Health System.
- Mergers between hospitals such as Massachusetts General Hospital and Brigham and Women's Hospital.

For insured patients and providers serving them, these changes are not entirely dependent on health care reform. Health care reform will only accelerate these changes, but the direction of change is already well established. Even Medicaid patients are likely to experience these changes as the state Medicaid program implements more managed care strategies.

However, for uninsured patients and providers serving them, the impact of these changes may be lessened. All hospitals serve the uninsured to some degree. However, in safety net providers, uninsured patients make up a substantial portion of the patient volume. At Boston City Hospital, uninsured patients represent almost 40% of all admissions. In community health centers, uninsured patients represent almost 25% of all patient visits on average.

If universal access is substantially achieved, then the uninsured will likely be enrolled in managed care plans and the impacts noted above will apply -- including the decline in inpatient utilization and the pressure to form integrated delivery networks. On the other hand, if no progress towards universal access is made, the uninsured will be less affected by these market changes. Consequently, depending on state or federal programs, the pressures of the changes noted above may be felt less by safety net providers. Despite the uncertainty regarding whether full universal access will be achieved, the safety net providers in Boston should prepare for these changes for the following reasons:

- A substantial portion of their patients are insured and will be affected by the changes noted above. Non-Medicare insured patients (including Medicaid) represent over 50% of BCH discharges and over 60% of all CHC visits. BCH and the CHCs cannot afford to ignore the market trends affecting these patients.

- Although full universal access, in the short term, may be unlikely, there are many scenarios that could result in substantial increases in access. Insurance reform and small business pools could enable a substantial number of the uninsured to purchase health insurance without an employer or individual mandate. If federal reform falls short, state reform may substantially expand access. Recent polls indicate substantial support for universal access among residents of Massachusetts. With the effective date of the employer mandate passed in 1988 still scheduled for 1995, the state legislative and executive branches must address this issue during the current year. Lastly, Massachusetts is one of the few states already expending significant sums on providing services to the uninsured. The state has a $350 million Uncompensated Care Pool that reimburses hospitals for care to eligible patients. Reform might either change the operation of the Pool or utilize these funds to provide increases in access.

Boston City Hospital and the community health centers must continue to devise strategies which anticipate these changes in the health care marketplace The adjustments required by these market trends are challenging and will require several years to complete Other health care institutions are anticipating change and beginning to position themselves Organizations that wait until the outcome of reform debates is clear may be left behind without any hope of catching up to their competitors

IV. BCH Findings and Recommendations

Boston City Hospital has a proud history of clinical excellence and community service dating back to its founding in 1864. A concern for the "sick poor", some of whom were unable to find care in the already overcrowded other hospitals in the city, and a strong sense of civic pride in providing medical care to the "ill, poor and destitute" were the major foundations for BCH's establishment. There are now many other excellent hospitals in Boston, all with strong clinical, research and teaching programs. However, among them, it is only BCH that has as the core of its mission a special focus on the medically underserved and poor of the city of Boston. Throughout its 130 year history, BCH has remained committed to providing high quality services to this population. Today, almost 90% of the care provided at BCH is to Boston residents. It is the major provider in the city of hospital care to the uninsured.

Boston City Hospital's emergency and trauma services are second to none in dealing with the unfortunate results of urban poverty and violence. BCH continues to develop culturally sensitive programs to break down the barriers some of Boston residents experience in trying to get health care for themselves and their families. Its efforts to combat the diseases of urban poverty reach beyond the hospital into the community where BCH works closely with other providers to address public health problems in neighborhoods across the city.

The BCH campus also serves as a major anchor for economic activity in that portion of Boston's South End, an area of the city which is undergoing significant economic change. It employs over 2,200 people. This campus could be the core of a growing medical, research and biotechnology community. The efforts of BCH, BU Medical Center, the City of Boston and entrepreneurs from the private sector could lead to this area becoming a striking example of economic success in the inner city.

BCH has never wavered in its commitment to provide the highest quality medical care to the poor and underserved of the city. The Commission feels strongly that the residents of Boston have been well served by the existence of a hospital with that unique focus and that the need for BCH will continue. It is with that perspective that the Commission analyzed the current situation at BCH and developed its recommendations for the future.

The Commission reviewed data regarding Boston City Hospital's volume trends, relative unit costs, consumer perceptions, market share trends, and referral sources In order to preserve its financial and operational viability, BCH must achieve the following strategic imperatives

- Implement substantial unit cost reductions
- Improve the quality of its consumer services and transform its image among consumers
- Expand its primary care base

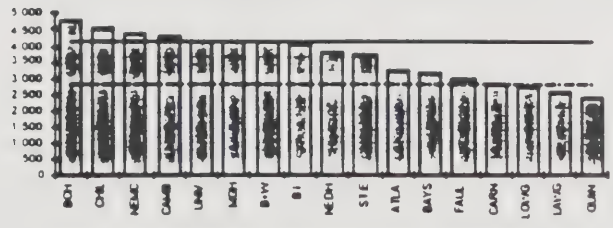
These imperatives can be applied to all hospitals However, for the first two imperatives, the magnitude of the change is greater for BCH For the third imperative, BCH is disadvantaged in the financial resources it has to invest in primary care Each imperative is discussed further below

Boston City Hospital's Relative Unit Costs

Utilizing publicly available data on FY 1992 costs from the Rate Setting Commission and the Massachusetts Hospital Association, the Commission reviewed estimates of the average cost per case mix adjusted discharge for BCH and seventeen other Massachusetts hospitals These hospitals included all Boston hospitals and other hospitals serving other urban centers within the state. [1]

The resulting unit costs show that Boston City Hospital has the highest cost per case mix adjusted discharge in the city When mental health and substance abuse discharges are excluded,[2] Boston City Hospital is the highest cost hospital of all the hospitals reviewed Its costs are 16% above the average of the major Boston teaching hospitals and 69% higher than the community hospitals in the sample

Cost per Case Mix Adjusted Discharges
Excluding Mental Health and Substance Abuse DRGs
FY 1992



- **BCH is 16% higher than teaching hospital average and 69% higher than the community hospital average (excluding Cambridge) - 34% above all hospitals**

[1] The discharges for each hospital were classified by the All Payor Grouper developed by 3M and utilized by the state of New York, Massachusetts Blue Cross, and the Massachusetts Medicaid program. Each discharge was weighted for patient severity using the New York relative weights. The data was for fiscal year 1992.

[2] The case mix classifications and weights for substance abuse and mental health are often criticized for being too broad and a poor predictor of patient severity.

Some of BCH's high relative costs can be attributed to the socioeconomic status of its patients. Studies have documented that higher income patients are associated with lower costs and lower income patients with higher costs.[3] However, that factor alone does not appear to fully justify the size of the cost differential between BCH and the other hospitals in the sample reviewed by the Commission.

The average length of stay at BCH is 8% higher than the average of the other hospitals, accounting for some, but not a substantial portion, of the cost difference. A review of costs in a number of specific areas, for example, laboratory, respiratory therapy, laundry, and housekeeping, indicated that BCH's costs were usually much higher, on average, than the community hospitals and teaching hospitals.

Another possible explanation of BCH's high cost per case mix adjusted discharge may be that the diagnosis coding at BCH may be inaccurate or that alternate severity measures might reveal a higher patient intensity than identified through the All Payor Grouper. Regardless, BCH will increasingly bear the burden of proving that it is an efficient provider and not an inappropriately high cost provider. Managed care plans will utilize available information in selecting their hospital partners. The analysis used in this report is similar to the type performed by HMOs. Consequently, BCH must:

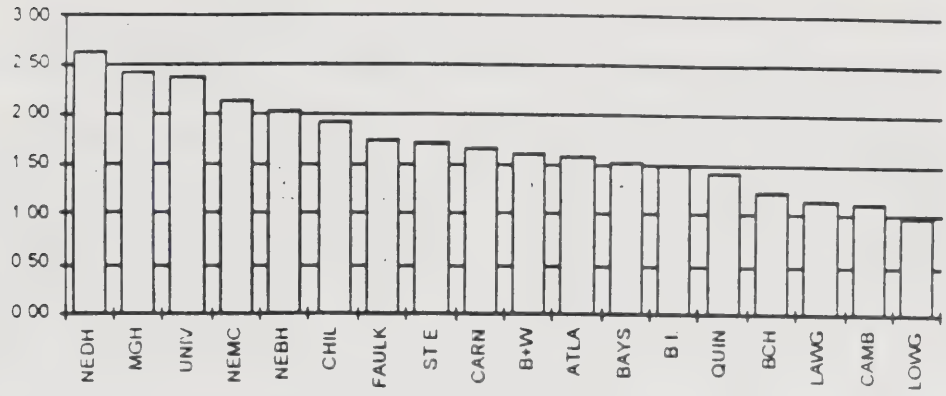
- become an efficient provider with lower costs according to these measures;
- prove to the satisfaction of managed care plans that correction of coding errors or alternative severity measures would demonstrate that BCH is not an inappropriately high cost hospital; or
- accept lower payment rates than appear necessary to cover their costs.

BCH should not expect that matching the average cost of the Boston teaching hospitals will be sufficient.

First, BCH does not appear to be primarily a tertiary hospital, as are most of the other Boston teaching hospitals. Of the hospitals included in the analysis, it has one of the lowest average case mix weights (a measure of the severity of the illness treated at the hospital). Except for trauma services and neonatal intensive care, which are tertiary services, BCH does not perform many of the tertiary procedures performed at other hospitals. Most of these types of procedures are referred to Boston University Medical Center. Trauma patients account for only 10% of BCH discharges.

[3] A study by Dr. Arnold Epstein at Brigham and Women's Hospital found that higher income patients were associated with lower costs and lower income patients with higher costs.

Average Case Mix Index (CMI)



- AP DRG Grouper - NY Weights
- All payors included
- Hospitals with large obstetric volumes show a lower average weight

Second, because of current consumer perception problems, many managed care plans, if faced with the choice of BCH or one of the other major teaching hospitals for the same cost, may choose the other hospital. In order to undertake the risks of overcoming consumer perceptions of BCH, the managed care plan will require significant cost savings relative to the other hospitals

Based on these considerations, the Commission believes that BCH must achieve cost reductions in its inpatient operations of between 20 and 30% Given total inpatient costs of approximately $100 million, this would equate to annual cost reductions of $20 to $30 million A 30% reduction would result in BCH's average costs being lower than all Boston teaching hospitals but higher than all the community hospitals in the sample. This does not take into account additional cost reductions necessary to adjust for declining patient volumes nor those necessary to match the aggressive cost reductions being considered by other hospitals. Consequently, this estimate may be conservative.

Cost reductions of this magnitude will be difficult to achieve. They must be accomplished without reducing the quality of clinical care or the quality of consumer services. Several studies have been performed at BCH to estimate potential savings opportunities through improving departmental productivity. The largest savings opportunity identified was $24 million and most studies identified substantially less. To maximize productivity improvements, department operations must be fundamentally re-engineered. Furthermore, reductions in the utilization of hospital services per patient must be pursued. BCH must explore ways to reduce average length of stay and the utilization of ancillary tests and procedures These type of re-

engineering and utilization improvements will require both one time and on-going investments in information technology and system wide processes which affect multiple departments The Commission believes that this investment must be made

Boston City Hospital's Consumer Image

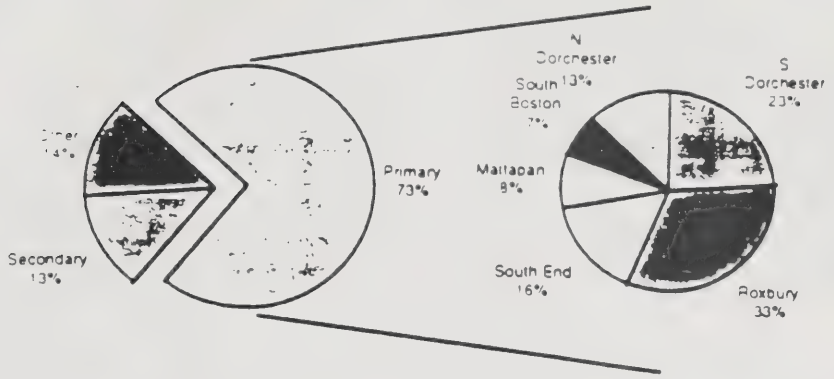
The consulting team assisting the Commission conducted a series of community interviews among groups representing the populations served by BCH and the community health centers The groups included both people who currently use both BCH and the community health centers and those that do not Participants in the interviews included the homeless, linguistic minorities, recent immigrants, African-American males, AIDS patients, "high risk" women, adolescent mothers, senior citizens, outreach workers and direct care givers serving these populations The focus of the interviews was to understand the participants' perceptions of the current system and providers, and how they might utilize the health care system in the future While the interviews were not intended to produce a statistically reliable result, the findings regarding the perception of BCH were particularly dramatic.

An overwhelming number of participants indicated that they utilize BCH only when they have no other choice. Many of the participants clearly believed that if they had no insurance, BCH was the only hospital that would treat them.[4] Many also stated that if they had insurance, they would use another hospital. Assuming that these participants are representative of BCH's target consumers generally, BCH risks a substantial loss in patient volume if health reform results in substantially increased access and choice of providers. The losses could be proportional to the volume losses incurred by BCH when the Medicare and Medicaid programs were initiated These programs increased access and choice to the elderly and the categorically needy In the early 1960's, BCH's average census was nearly 1000 occupied beds Today, BCH's average census is between 220 and 260 occupied beds.

Supporting this finding is an analysis of BCH's market share trends The Commission examined the market share trends for BCH by payor within its primary service area. BCH's primary service area includes the South End, South Boston, Roxbury, Dorchester, and Mattapan which together account for 73% of all BCH discharges.

[4] The participant's understanding of the Free Care policies of other hospitals and the availability of reimbursement through the Free Care Pool was extremely limited.

BCH Discharges by Area for 1991



- **Primary area includes**
  - Roxbury - 02119, 02120, 02121
  - Dorchester - 02122, 02124, 02125
  - Mattapan - 02126
  - South End - 02118
  - South Boston - 02127, 02210

BCH has the largest market share and accounts for 26% of all discharges for residents from its primary service area. For the period 1988 to 1991, BCH's volume of discharges from this service area was nearly constant. Given that, for the market in general, discharges increased at slightly less than 1% per year, this resulted in a slight loss in market share for BCH. However, breaking down the trends by payor demonstrates that BCH dominates its primary service area among uninsured or "self pay" patients and is rapidly gaining market share. For insured patients, BCH is losing market share. This data dramatically supports the findings of the community interviews. Uninsured patients, who appear uncertain that they will be accepted for treatment at other hospitals select BCH. Insured patients are less likely to select BCH and are increasingly choosing other hospitals.

1988-1991 BCH Primary Service Area

Market Segment	BCH Market Share	BCH Annual Growth Rate	Market Annual Growth Rate
Total Primary Service Area	26%	0%	1%
"Self Pay"	61%	5%	-1%
Medicaid	32%	-3%	2%
Medicare	15%	-4%	2%
HMO	9%	6%	17%

None of the interviews conducted or surveys reviewed by the consulting team indicated a problem with the quality of clinical services performed at BCH. The trauma and maternal and child services at BCH were often viewed extremely positively by the community interview participants. However, several sources suggested significant deficiencies in what can be classified in consumer services. Foremost among these were the cleanliness and security of BCH campus. The age and appearance of the physical plant were noted in several staff and community interviews. The new hospital building should alleviate or eliminate that issue for inpatient services but not for outpatient services. Administrative systems such as registration procedures were often described as cumbersome for patients. Complaints were voiced regarding the behavior of staff, the difficulties in obtaining an appointment and the availability of translator services.

The risk to BCH of expanded access to affordable health insurance is profound. To survive, BCH must change the perceptions of consumers so that they will affirmatively choose BCH over other institutions. Changing consumer perceptions is extremely difficult and cannot be accomplished overnight. Therefore, BCH must begin immediately to improve consumer perceptions by improving the quality of its consumer services. The new inpatient building will help, but unless it is followed up by sustained improvements, its effect will be short-lived.

BCH should also continue to work to build loyalty among particular segments of the communities it serves. For example, BCH has recently opened the Latino Health Clinic in which all providers and staff speak Spanish fluently. BCH has also begun several other "cultural enrichment" initiatives for Hispanics, Haitians and other non-English speaking minorities. These efforts should be emphasized, advertised and expanded. By meeting the unique needs of these large and growing segments of the population of Boston, BCH can build the consumer loyalty it requires in order to survive.

Improving the level of consumer services and creating new programs may not be enough. Consumer perceptions are slow to change. The time required to both improve services and change perceptions may be longer than the time available to BCH. A dramatic change which signals to the community that BCH has transformed itself may be key to accelerating changes in consumer perceptions.

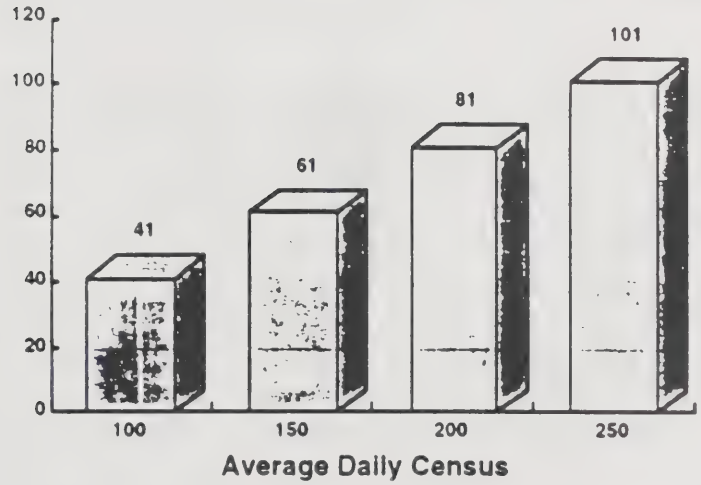
Building a Primary Care Base

Over three quarters, or 77%, of patients admitted to BCH arrive through the emergency department. While some of these may be due to current administrative procedures for admitting patients selectively, it does appear that a large number of BCH's patients have had no prior contact with a health care provider. If access is expanded and managed care is increased, a substantial number of these patients may be directed by their primary care providers and health plans to other hospitals or ambulatory care locations for their urgent and non-trauma emergency care.

In a survey of patients admitted during August of 1993, only 33% reported any prior contact with a health care provider related to that admission. Again, if access is expanded and managed care increased, the remaining two thirds may be directed to or choose other hospitals for their care. Only 10% of patients in this survey reported prior contact with a community health center. This suggests that the referral relationship between BCH and the CHCs is weak. Information from the community health centers also suggests that the volume of referrals from CHCs is very low. Given the similarity in mission for BCH and the CHCs, this finding appeared particularly significant.

The Commission reviewed data on the relationship between primary care referral sources and inpatient utilization. The projected number of primary care physicians within BCH's referring network necessary to maintain its current census is between 80 and 100 primary care physicians[5]. The medical staff at BCH was asked to assess the number of full time equivalent primary care physicians either on staff or referring to BCH from community health centers. Their estimate was less than half the estimated required number.

Primary Care Physicians Required Within the BCH Network



[5] Assuming inpatient utilization of 600 inpatient days per thousand population and one primary care physician per 1500 patients. No allowance is made for patients, who would appropriately be admitted through the ER in the future. Making this allowance would decrease the number of primary care providers required. No allowance is made for patients referred to other institutions for specialized care which would increase the number of physicians required.

These estimates are necessarily imprecise. However, they indicate the magnitude of BCH's task. Building a stronger primary care base is a challenge facing all hospitals. BCH has some advantages. First, it has a proportionally larger primary care staff in its own Ambulatory Care Center than do most Boston hospitals have in their outpatient departments. Second, its residency programs place a substantial number of the primary care physicians who practice in urban neighborhoods and health centers. Its disadvantages include its market image, its limited current referrals from community health centers and perhaps most importantly, its limited funds to invest in building its primary care network.

Many health care providers and insurers are spending substantial sums to build their primary care base. BCH must make similar investments. These investments include recruiting physicians directly and making investments in community health centers. Community health centers have substantial investment requirements for facility improvements, physician recruitment and retention as well as for the information technology and managerial expertise required to obtain and manage HMO contracts. Many community health centers require substantial financial and managerial assistance in making these investments. As CHCs look to join integrated networks with hospitals, they will be looking for partners to provide some of that assistance. Given the shared missions of the community health centers and BCH, they would be likely partners in such a network. However, if BCH cannot provide the necessary assistance, the community health centers may be more likely to look to other hospitals for such partnerships. BCH's patient volume may decline to a level too small to support efficient operations if they are unable to attract a substantial share of the CHCs primary care capacity into its network.

These challenges are substantial. They will require a formidable effort on the part of the management and staff of BCH as well as fundamental changes in the structure of BCH and its relationships with other health care institutions. The city contribution to the costs of Boston City Hospital must continue as BCH implements the major changes necessary to ensure its future viability. The Commission believes that a commitment for a fixed level of subsidy over a finite number of years will provide BCH with transitional support and incentives to decrease costs. In order to make the changes recommended by the Commission, BCH will also need to make significant one-time investments in areas such as departmental re-engineering and primary care network development. Such an investment fund must be developed.

Alternative Forms of Governance

BCH is currently structured as a department of city government. This structure impedes effective management in the areas of labor management, supplies management, establishment of organizational incentives, decision-making, and building relationships with other providers. Efficiency in all of these areas is critical to BCH's successful implementation of the major changes described in this report.

Nearly 80% of the non-nursing employees of BCH are covered by civil service regulations. The Civil Service regulations are often barriers to creating necessary new job descriptions, adjusting salaries to market conditions and motivating employees. In addition, most employees are covered by unions with city wide bargaining units. Consequently, many labor relations functions are handled by City Hall for the city as a whole rather than specifically for BCH. The labor concerns of BCH management are often diluted by the concerns of other departments and general political pressures. The bewildering overlap of union rules and civil service creates confusion over the rights of employees and management. These factors and the general pressures on public employment produces the following problems for management:

- Non competitive wage rates where payment for skilled employees are generally below market rates and for unskilled employees are above market rates.
- Difficulties in hiring and retaining key management personnel
- Barriers to effective employee motivation
- Delays in creating new positions and adjusting wages to market conditions

BCH operates under municipal procurement regulations and encumbrance procedures. The procedures often result in higher costs at BCH, hoarding of supplies by staff to avoid stock-outs, and considerable management time spent trying to troubleshoot problems.

The City Council approves separate expense and revenue budgets for BCH. Separate consideration of revenues and expenses often leads to destructive cost reduction efforts where the resulting revenue decline exceeds the expense reduction. There are limited incentives to maximize revenues or institute efficiencies, since it will not result in relaxing budget constraints. Lastly, any excess of revenues over expenses is not retained by BCH. Consequently, management cannot accumulate surpluses for investment.

BCH management decision making is subject to multiple approval levels for each decision. For major decisions, the City Hall administration and City Council must review management's recommendations. This results in long approval times and often micro-management of relatively minor operating issues.

It is the Commission's view that the current governance structure contributes to BCH's high cost position and makes it more difficult for BCH to reduce costs as required to become more competitive as well as to respond effectively to potential volume decreases. It also represents a substantial barrier to BCH's ability to improve consumer services. The current departmental structure also provides BCH with much less flexibility in making investments in its primary care base and in participating in joint ventures.

A wide variety of options for changes to the governance structure were considered First, the department structure could be retained with selected reforms in areas such as procurement, budgeting and revenue retention. Second, the hospital could be converted to an authority or public benefit corporation Lastly, BCH could be reorganized as a not-for-profit corporation

These options can be considered as a continuum. Each option can be structured and modified in an infinite number of ways. Moving along the continuum from a department to an authority or public benefit corporation to a not-for-profit provides management with greater flexibility and autonomy to meet the challenges facing safety net hospitals. It is possible for an authority or a not-for-profit structure to provide similar levels of flexibility and autonomy, depending on the details of the authority structure as determined by the enabling legislation and the political relationship that evolves between the new entity and the city government. One issue that may be an important distinction between the two, however, is the ability of the new entity to merge with another not-for-profit organization. Since an authority is still a governmental body, a merger may be very difficult to accomplish with that governmental structure. An intermediate step between an authority and not-for-profit would be a public benefit corporation. This would be a unique corporate structure specifically defined by the enabling legislation and would not follow the existing forms of incorporation currently established by Massachusetts law

To evaluate the risks and rewards of each model of governance, the Commission reviewed the experience of other safety net hospitals across the country. These safety net hospitals included examples of each model. The consultants working with the Commission also interviewed senior managers at several of these hospitals to understand their experiences and perspectives regarding alternative forms of governance.

Almost every manager interviewed recommended conversion to at least an authority form of governance. They cited their prior experience with many of the factors noted above as those requiring greater flexibility and autonomy. They gave numerous examples of the improvements that resulted from improved labor and supplies management as well as from clearer incentives and more efficient decision making processes. An analysis of the cost per adjusted discharge (including adjustments for case mix and local wage rates) for a sample of safety net hospitals showed that average adjusted cost per discharge was 10% lower for safety net hospitals under the authority form than for hospitals which operated as a department of government. The average cost for those hospitals under a not-for-profit form was 17% lower than for departments.

The primary concern expressed about providing safety net hospitals with greater autonomy is the potential that they would abandon their mission of serving the underserved. Each hospital studied, including those converted to an authority or a not-for-profit corporation, continued to receive a subsidy from the county or municipal government. Through this annual subsidy, the local governments ensure

that the hospital remains committed to its mission The experience of not-for-profit safety net hospitals such as Francis Scott Key in Baltimore, the Regional Medical Center in Memphis and Truman Medical Center in Kansas City show that greater managerial autonomy did not result in the loss of the mission of these hospitals Each of these institutions have been a not for profit hospital for at least ten years and continue to serve the underserved in their communities

In the analysis of safety net hospitals noted above, hospitals under all forms continued to provide substantial services to Medicaid and uninsured patients The average "indigent ratio" - the percentage of patients either uninsured or Medicaid patients - was approximately 70% for all forms of governance, including the not-for-profit alternative.

It is the Commission's view that a change in governance structure is critical to BCH's ability to implement and sustain the changes necessary to ensure its future viability Conversion to either an authority, public benefit, or not-for-profit corporation status can be designed to maximize the potential for BCH's success while protecting its role as a safety-net hospital

Collaboration and Integration Strategies

Collaboration and integration with other hospitals could provide BCH with significant cost reduction opportunities through economies of scale, avoided capital investments, and management expertise. Collaboration and integration approaches could also improve BCH's consumer image either through signaling fundamental change or through "borrowing" the image of a partner institution. Collaboration or integration partners could also assist in building BCH's primary care base through financial assistance, medical staff recruitment and managed care expertise. Potential risks of collaboration and integration strategies include the addition of overhead costs and organizational complexity, misalignment of incentives with partners leading to disagreements and delays, and the diversion of mission or market focus.

The Commission considered several alternative collaboration and integration strategies for BCH including:

- Establishing a series of clinical joint ventures with several of the Boston Teaching Hospitals and thereby leveraging the clinical strengths of each institution
- Creating a strong strategic affiliation and partnership with a single partner where each would attempt to operate as one economic entity yet BCH would retain its own corporate identity and fiscal autonomy

- Merging with another hospital to create a unified corporate structure with one set of financial statements, unified systems and procedures and a single management team

Each collaboration and integration option involves some of the benefits and risks noted above. However, full integration, including creating a single corporate entity to operate BCH and its partner, maximizes the advantages while minimizing the risks. A single "bottom line" and unified management will facilitate the maximum cost savings, provide a dramatic symbol of changes at BCH and will remove barriers to investment in BCH's primary care network.

Boston University Medical Center (BUMC) is the obvious choice for an integration partner. Its location adjacent to the BCH campus provides the greatest opportunity for shared services. The institutions already share medical staff and have a long history of close collaboration. Boston University School of Medicine is at both hospitals. The services provided at the two institutions are complementary. BUMC is also dependent on BCH for some of its teaching programs and patient referrals. BUMC's willingness to invest in BCH should be greater than other Boston Hospitals.

One consulting study performed for BCH and Boston University Medical Center (BUMC) estimated the consolidation savings for both institutions to be at least $8 million annually. BCH plans information technology investment of nearly $3 million over the next two years. Several of these investments have already been implemented at BUMC and could be avoided if BCH and BUMC merged. A consolidated managerial expertise could also contribute to achieving the efficiency savings noted above.

Recommendations

I. Boston City Hospital (BCH) must continue to strengthen its role as an urban safety net hospital, dedicated to providing high quality services to meet the health care needs of all residents of Boston, regardless of their ability to pay.

II. There should be a fundamental change in the governance structure of Boston City Hospital. The governance structure should be converted to that of either a public authority, public benefit corporation or non-profit corporation.

   A. The change in governance structure should begin immediately in order to facilitate an increase in BCH's operating efficiency and to allow it to meet the challenges of the changing health care marketplace.

   B. The change in governance structure must be designed to assure BCH's continued special treatment under Medicaid and other reimbursement programs.

C. The change in governance should be designed to allow for the development of formal affiliations with other institutions as described in Recommendation VI

III. The City of Boston's financial support to Boston City Hospital must be continued through a contract for medical services for the underserved

A. For the first five years of operation under a new governance structure, the contractual support should be set at least at the level of unreimbursed costs currently projected to be incurred by BCH under its present form of governance.

B. After the first five years, the annual contractual support should be re-evaluated in light of the impact of state and federal health reform and universal access. To the extent that there are still underserved populations, the subsidy should be determined based upon such criteria as
   - Per capita payments for uninsured persons where feasible
   - Per encounter payments based upon revenue shortfalls for an "efficient provider"
   - Specific payments for unique "safety net" services - e g
     - » MD Fee subsidy
     - » Social work services
     - » Translator service
     - » Trauma service

C. The City of Boston should contract with BCH to provide the Emergency Medical Services as long as the reimbursement advantages of such an arrangement persist.

IV. In order to encourage community health centers and community health center networks to join Boston City Hospital's primary care network, the following steps should be taken:

A. Community health centers which operate under BCH's license should be required to participate in BCH's primary care network through formal contracts which identify the specific obligations of all parties.

B. City of Boston investments, such as capital funds, should be targeted to community health centers that join the BCH network.

V. In addition to annual contractual support, Boston City Hospital requires a one-time investment fund. Estimates for this range from $20 to $25 million Federal, state, city, private and foundation sources should be sources for this fund

Examples of uses of this fund include:

- development of an expanded primary care network
  - » investing in community health centers (CHC and hiring physicians)
- operations re-engineering
- development of information systems
- other facility improvements (e.g., parking space and Ambulatory Care Center renovations)

VI. Boston City Hospital should enter into negotiations toward full integration with Boston University Medical Center (BUMC).

- This should be pursued simultaneously with efforts to change the governance of BCH

- Among issues to be negotiated:
  - Size and structure of the annual city contract
  - Responsibility for BCH debt
  - Investment in primary care network within Boston
  - On-going commitment to the underserved of Boston
  - Specifics of corporate structure (e.g. does BCH remain a separate corporation with a holding company or are the corporations merged)
  - Opportunities to combine services
  - Opportunities for cost reductions
  - Research and education

V. CHC Findings and Recommendations

The Columbia Point Health Center in Boston (now the Geiger-Gibson Community Health Center), was the first community health center in the country when it was established in 1965. Columbia Point and the other health centers in the city were founded in response to concerns over the dramatic shortage of primary care physicians. There are now twenty five community health centers in Boston providing nearly 1.2 million visits a year to the residents of the city's neighborhoods The majority of the patients served by the health centers are poor and often have significant needs in addition to health care. Many health center clients are recent immigrants who may find gaining access to health care in Boston daunting. The CHCs are an integral part of their neighborhoods and often provide social, vocational, housing, educational and recreational services in addition to health care. The Commission recognizes the vital role of the Boston community health centers and believes that their role must be maintained and supported.

The growth in managed care and the development of integrated delivery systems provide significant opportunities for Boston's community health centers The critical case management function of primary care providers, the emphasis on prevention and primary care under capitated payment systems, and the primary care clinician's growing influence over referrals, all provide the health centers with the potential of playing a crucial and central role in the evolving health care market

With the assistance of the consultants, the Commission reviewed the structure of the Boston community health centers, their reliance on patient generated and grant revenues, the financial position of the centers, and the competition among health centers and hospitals.

Independence of Community Health Centers

One of the primary features of the corporate structure and culture of the community health centers (CHCs) within Boston is their independence. Historically this independence has sustained and supported the health centers in their important role as community institutions dedicated to providing a wide range of health and social services to the poor and underserved of Boston.

Boston has twenty-five (25) health centers: fourteen (14) freestanding, independently licensed community health centers, four (4) licensed by Boston City Hospital and seven (7) licensed by private teaching hospitals. Freestanding CHCs are governed by representative community boards and have a long tradition of being financially and programmaticaly autonomous. Also, as a practical matter, the BCH licensed health centers operate with virtually complete independence and maintain autonomous community boards with full budgetary and programmatic control. Because of their independence, both the freestanding and BCH licensed CHCs have historically

maintained referral and other programmatic relationships with multiple hospitals. In many ways, they operate similar to community private practice physicians with voluntary and multiple relationships with hospitals.

The seven private teaching hospital-licensed CHCs are the only health centers within Boston which are not independent of other organizations. Typically, they are managed as departments of their licensing hospital, and few, if any, operate as independent business units with their own bottom lines.

Boston Community Health Centers

Freestanding and Hospital - Licensed

Freestanding - 14	BCH - Lic. 4	Private Hospital - Lic. 7
1. Boston Evening Medical Center	*1. Codman Square*	*Brigham and Women's Hospital*
2. Dunock CHC	*2. Dorchester House*	*1. Brookside*
3. Fenway CHC	*3. East Boston CHC*	*2. Southern Jamaica Plain*
4. Geiger - Gibson CHC	*4. South Boston CHC*	*Carney Hospital*
5. Harvard Street CHC		*3. Bowdoin Street*
6. Joseph M. Smith CHC		*4. Little House*
7. Mattapan CHC		*Children's Hospital*
8. Neponset CHC		*5. Martha Elliot*
9. North End CHC		*Faulkner Hospital*
10. Roxbury Comprehensive CHC		*6. Greater Roslindale CHC*
11. South Cove CHC		*Mass General Hospital*
12. South End CHC		*7. Bunker Hill CHC*
13. Upham's Corner CHC		
14. Whittier St. CHC		

As the CHCs become more involved with managed care and integrated delivery systems, the existing independence of the freestanding and BCH licensed health centers may be difficult to sustain. The same financial and market pressures being faced by solo practitioners and unaffiliated providers within the health care system will be experienced by those health centers that seek to maintain their traditional independence.

Reliance on Patient Care Revenues

Over the past fifteen years, health centers have become increasingly reliant on patient generated revenues as their major source of support. Since 1979 the CHCs reliance on patient fees increased from 48% to 75% of their total health services related revenues. Grant support from federal, state, and city public health programs as well as private and foundation sources has grown at less than inflation while revenues from Medicaid, Medicare and other third parties have grown seven fold since 1979.

In the past, the reliance on patient generated revenues vs grants has varied among the community health centers. BCH and private teaching hospital licensed health centers have been more dependent on patient generated revenues. They received preferential reimbursement from their status as a hospital clinic and also qualified for reimbursement from the hospital based Uncompensated Care Pool. These advantages have diminished as reimbursement rates have equalized between hospitals and community health centers. In addition, since 1992, the freestanding CHCs have been eligible for payment from the hospital based Uncompensated Care Pool. To compensate for the historical constraints on patient revenue sources, the freestanding CHCs have pursued grant funding and remain more dependent upon this source of funding than the hospital licensed health centers.

Looking forward, the constraints on grant funding sources will likely continue. Absent reform, government budget constraints will result in overall funding levels which will be unlikely to exceed inflation. Even with reform, any increase may be short lived; within President Clinton's health care reform proposal, the new funding for "essential providers" and other special programs for the underserved are described as transitional funding to enable eligible providers to prepare for a role in the general healthcare marketplace. Consequently, any new source of funds for CHCs will likely be generated from patient revenues.

Traditional patient revenue sources, particularly rates of payment under fee for service will also be limited. Prospective payment methods and competition will limit fee increases and place pressure on operating margins. However, the expansion of managed care and the trend toward integrated delivery systems change the way other providers view primary care operations and offers the CHCs opportunities to secure ongoing, reliable, sources of revenue. For instance, while the private Boston hospitals have supported their own licensed health centers, they have historically been a minor source of support for the free standing CHCs, $1.8 million in 1992. This could change dramatically. For hospitals and CHCs choosing to join together in integrated systems, hospitals will be more likely to view the health centers as partners and provide funds to them as strategic investments. In return for such investments, these hospitals will require closer, more exclusive relationships and full participation in their integrated delivery systems.

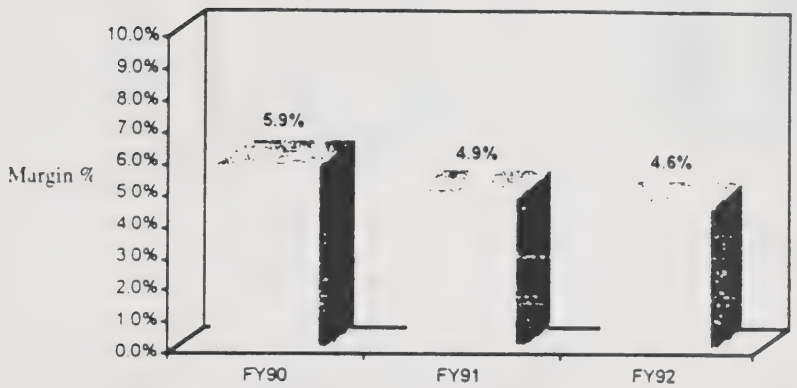
Financial Strength

The Commission reviewed the financial status of the fourteen free standing health centers and its impact on their ability to maintain their physical plant and equipment as well as recruit and retain primary care physicians.

A review of the revenues over expense margins for twelve of the freestanding CHCs for the three year period FY'90 through FY'92 showed that, overall, operating margins have declined from an average of 5.9% in FY'90 to 4.6% in FY'92. Given the grant funding and reimbursement trends noted above, this finding was not surprising

and margins will likely continue to decline. These margins are the CHC's primary source of funds for investment in plant and equipment. These investments are critical to the provision of quality care and to a quality consumer image. They cannot be delayed indefinitely.

Freestanding CHC
Excess Revenues Over Expenses
Average FY90 - FY92

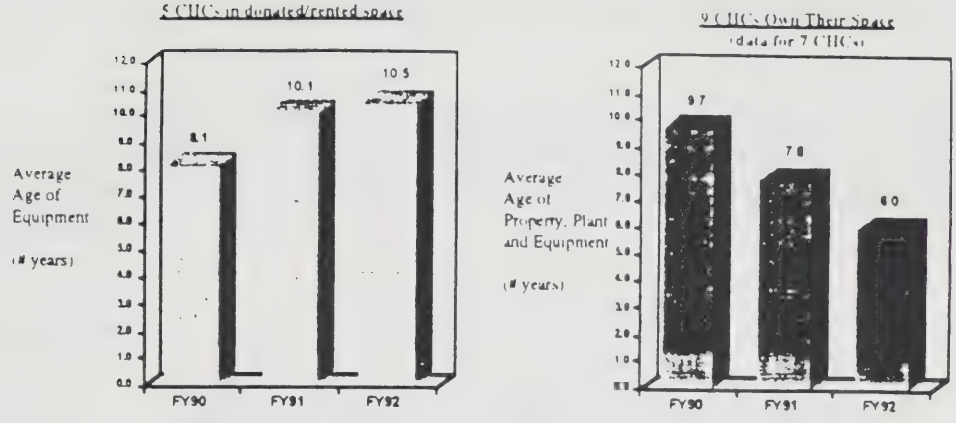


- Overall, CHC margins are declining
- Over time, margins must be sufficient to finance replacement and growth of plant and equipment and working capital while maintaining reasonable debt ratios
- Factors driving increasing investment include inflation and volume growth

Source: RSC Cost Reports. Data exclude Boston Evening Medical Center and Nejameet Health Center due to lack of data for all 3 years.

In spite of the declining margins, several of the free standing CHCs have made significant investments in their plant and equipment over this period. Overall the average age of plant and equipment for the free standing CHCs declined from 9 to 8 years from 1990 to 1992. For the nine freestanding CHCs which own there own buildings, the average declined from 9.7 to 6.0 years during this period. However, even this rate of investment is inadequate. Many of these health centers require substantially more investment to catch up to past delays in plant maintenance and equipment purchases. Improvements in margins are critical to support this investment.

Freestanding CHC
Average Age of Property, Plant and Equipment
FY90 - FY92



CHCs have not been replacing equipment

CHCs in owned space have been investing recently

Source: BSC Cost Reports and CHC Financial Statements

The capital needs of the CHCs have been recognized by the City of Boston and the Conference of Boston Teaching Hospitals. Both are involved in efforts to assist the CHCs in capital formation. Much of the proposed support is in the form of credit enhancements. These enhancements will provide much needed support to the health centers. However, many of the health centers will continue to be unable to meet the cost of any increase in debt for building improvements or equipment upgrades. Only one of the six Boston CHCs who reported their planned capital investment in a survey reviewed by the Commission appears able to cover their requirements through additional debt. Of the fourteen freestanding health centers, three had no estimated debt capacity and three more could not borrow more than $500,000.

The CHC's financial condition also limits their ability to recruit and retain full time medical staff. On average the CHCs employ two physicians to fill one full time physician position. The number of physicians per full time position ranged from 1.2 to 5.3 among the health centers surveyed. Reliance on part-time physicians is problematic in two ways. First, it complicates continuity of care and the development of an on-going relationship between physicians and their patients. In the community interviews conducted among groups that use the community health centers, participants cited the inability to see the same doctor or provider each time as one of the major problems with the CHCs. A number of participants indicated that they traveled out of their neighborhoods because they follow a provider who knows them and their family. Second, it reduces the ability of the medical staff to manage the full care of a patient as is being demanded by managed care plans. Several managed care plans have established minimum weekly clinician hours of between 16 and 20 hours per week. On average, the medical staff of the CHCs barely meet this minimum and several of the CHC physicians would not meet this requirement.

In interviews with the consultants, the reasons CHC executive and medical directors suggested for the difficulty in recruitment of full time medical staff included staff isolation/burn out, lack of training and research opportunities, low status within the medical community, increasing competition for multi-lingual physicians and low salaries

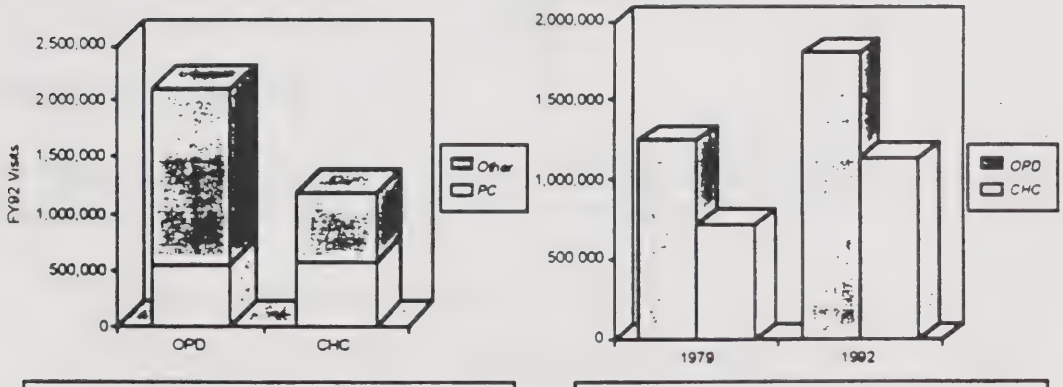
With the increasing salaries of primary care physicians, this recruitment problem could grow worse. However, many of the factors cited by the CHCs as contributors to this problem, could be addressed through the CHCs joining as partners in an integrated delivery network.

Competition

Since 1979, as inpatient utilization has declined, the ambulatory health care services market has grown significantly. The market is very competitive and will become even more so. While the community health centers have performed well competitively, they should expect and prepare for more aggressive and better financed competitors than they have faced in the past.

Community health centers and hospital outpatient departments in Boston provided over three (3) million ambulatory care visits in 1992; an increase, since 1979, of 59% for the CHCs and 45% for the OPDs. The community health centers and the outpatient departments are equally significant providers of primary care providing, in aggregate, approximately 500,000 primary visits each.

Volume of Encounters



- CHCs are not the only major providers of primary care to Boston residents
- OPDs provide an equal volume of primary care

- CHCs are growing at a faster rate (59% vs. 45%)

Source: FY 1992 CHC and OPD data self-reported in Mayor's Health Care Commission data request.
FY 1979 CHC and OPD data from A Promise Kept: Boston's Neighborhood Health Centers, DH&H 1982.
For the FY 979 versus FY 1992 comparisons, Hospital data excludes Faulkner and Boston VA Hospitals since FY 1979 data was unavailable.
CHC data excludes Boston Evening Medical Center since FY 1979 data was unavailable

Hospitals and CHCs provided to the Commission ambulatory patient origin data for their top ten (10) zip codes for FY'92. The Commission and consulting team used this data to evaluate the market concentration and utilization by neighborhood[6]. In most Boston neighborhoods, consumers are choosing to seek health care services at many different sites of service. Neighborhood residents have many choices and they are exercising their ability to choose both inside and outside their own neighborhoods. For instance, the residents of Dorchester are included among the top ten (10) zip codes for twenty-nine (29) different providers, including nineteen (19) CHCs and ten (10) OPD; residents from Mattapan, with one (1) CHC in their own neighborhood, were named in the top ten (10) zip codes of seventeen (17) providers, thirteen (13) CHCs and four (4) OPDs.

During the community interviews participants reported that they often seek care in multiple locations citing a number of reasons including: clinics outside their own neighborhoods treat them better, they seek doctors who speak their language, or they may follow a provider who knows them and their family. Participants in the interviews also cited limited service in the CHCs as one of the major reasons for seeking care in hospital outpatient departments. Several said they prefer the OPDs, which they see as "one stop shopping". This is especially true when consumers perceive that they are going to need ancillary services such as a diagnostic laboratory services or x-rays which the CHCs most often don't provide on site. Long waits and short visits caused other participants to seek care at alternative sites of care.

The increased emphasis on primary care within the health care marketplace accentuates an area of strength for CHCs. However, they cannot afford to be complacent. Most neighborhoods are very competitive. The Boston hospitals provide a significant share of ambulatory services and have advantages in scope of services and financial resources. Furthermore, if reform succeeds in expanding access to health insurance, patients who were previously uninsured will have even greater choice as to where they may receive their care.

Strategic Imperatives

The Commission concluded that in order to preserve their financial and operational viability, CHCs must accomplish the following objectives:

- Prepare to compete for patients
- Develop the capability to manage under capitation
- Prepare for less autonomy

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[6] Since the data only included volumes for each provider's top ten zip codes and excluded emergency room visits, private medical practices and staff model HMO's, the market concentration statistics tend to be overstated (encounters from zip codes other than the top ten are unreported) and the utilization measures are understated (other providers are also serving these neighborhoods).

Prepare to Compete for Patients

As the ambulatory services market becomes more competitive, CHCs must also provide a more competitive level of services. CHCs are vulnerable to competition from potentially better financed providers in a number of areas including: the quality of their facilities, their ability to provide continuity of care, the breadth of services provided and the consistency of consumer services

Because they have not typically faced intense competition in their historically underserved areas, some CHCs may not immediately recognize either the opportunity to overcome the limitations of the past or the seriousness of the competitive threat With the appropriate organizational changes, CHCs can be well positioned to take advantage of these opportunities and overcome the threats They must, however, be prepared to address the need for change.

Develop the Capability to Manage under Capitation

The growth of managed care plans will have a major impact on the CHCs. Non-Medicare insured patients (including Medicaid) represent over 60% of all CHC visits, while the uninsured represent almost another 25% of all patient visits Indemnity plans using fee for service reimbursement will decrease substantially as a source of revenue Privately insured patients in the urban neighborhoods served by the CHCs may increasingly select HMOs due to the increasing cost differential between these plans and traditional indemnity insurance. The state Medicaid program is actively pursuing managed care strategies to control costs To the extent that health reform succeeds in providing insurance to the uninsured, the impact of managed care on CHCs will increase

Managed care and capitation contracts, represent a real opportunity for all primary care providers including the CHCs. On the other hand, accepting the risk of capitation requires that the providers accept the responsibility for the case-manager or "gatekeeper" role. The CHCs must develop the information systems and management procedures to monitor the care of their patients and the associated costs through all inpatient and ambulatory settings. The providers must work together to establish protocols and procedures to assure both quality care and cost control.

The economics of managing under capitation favors larger organizations. First of all, larger organizations can spread the insurance risk of capitation. With more covered lives, the variability of the cost of caring for individuals becomes more manageable and predictable. Furthermore, larger organizations can spread the fixed cost of investments in information systems and establishing contractual and referral linkages.

Prepare for less autonomy

CHCs have long cherished their autonomy from other health care institutions, including other CHCs. Historically, their autonomy has been instrumental in enabling the CHCs to be more responsive to their communities However, the growth of managed care and the development of integrated delivery systems will require CHCs to forego some of their autonomy. In order to capitalize on the potential that these new systems present, CHCs must select or join an integrated delivery system, while at the same time retaining their ability to serve the needs of their communities

Currently, most CHCs, like other providers, attempt to participate in as many managed care contracts as possible While maintaining multiple contracts allows the CHC to retain its independence, continuing to contract with multiple plans is administratively complex. The administrative requirements of managing multiple plans with multiple insurers will stretch CHC resources

Attempting to participate in too many networks can limit the potential advantages of such an affiliation. As integrated delivery networks invest in their primary care base, CHC's can benefit from that investment. These funds could enable CHCs to upgrade their facilities, recruit and retain physicians and expand their ancillary services The network can also provide information systems and management expertise. However, to the extent that the integrated network is unsure of the long term commitment of a CHC, its willingness to invest may be lessened. Rather, the network may choose to invest in providers where they are more certain of a return on their investment

Participating in an integrated delivery system requires coordinating with the system regarding referral relationships, system selection, health plan contracts, recruitment of medical staff and many other operating decisions. In other words, it requires the CHCs to forego some of their autonomy. On the other hand, CHCs can benefit from the investment and expertise that an integrated system can provide. There are no more likely alternatives source for such investments. Rather than resist this loss of independence, CHCs might pursue an integration strategy which best preserves their mission and best serves their community.

Organizational Alternatives

The Commission reviewed three options for the community health centers to pursue in developing their integrated delivery system strategy. 1) They could pursue a horizontal integration strategy where most of the CHCs merge or join together to form their own integrated delivery system. 2) Individual CHCs could pursue a vertical integration strategy where they negotiate directly with hospitals or other sponsors of integrated delivery systems regarding their participation. 3) The CHCs could follow a strategy which combines elements of both horizontal and vertical integration.

- Horizontal Integration

A horizontal integration strategy would involve CHCs joining together to collectively manage capitation contracts with a health plan and develop a fully integrated delivery network [7] This could involve working with the Neighborhood Health Plan (NHP) or another organization to create a group or staff model HMO NHP is currently an Independent Practice Association (IPA) model HMO NHP already has close ties to the CHCs; it contracts with all CHCs and its Board is appointed jointly by the CHCs and the Massachusetts League of Community Health Centers. NHP already provides resources to CHCs in order to enhance their ability to manage care and to help develop competitive levels of service. However, the independence of each CHC limits their ability to operate in a coordinated fashion. By strengthening the organizational and operational linkages between the CHCs, they could jointly acquire information technology, attract capital, recruit physicians and implement the remaining tasks necessary to compete and manage under capitation.

The primary advantage of horizontal integration is that all CHCs fundamentally share the same mission, and it is more likely that the resulting organization will retain the same focus and priorities. The disadvantages involve the financial risk and the organizational complexity of creating a central organization. The CHCs would have to collectively attract external capital in order to finance investments in facilities, technology and physician recruitment. These investments will earn a return only when a substantial portion of CHC patients are enrolled in their managed care plan and covered by a capitation contract.

The organizational challenge of obtaining as many as eighteen (18) independent health centers to operate under joint management must also be overcome. Even if the health centers did not have a tradition of independence from each other as much as from other providers, the number of parties involved in this integration strategy creates a substantial obstacle for a purely horizontal approach.

- Vertical Integration

In a vertical integration strategy, individual CHCs could join a hospital or HMO sponsored integrated delivery system. Joining a vertically integrated system brings the financial benefits to the CHCs, although not without some risk. Joining a well capitalized hospital or HMO sponsored integrated delivery system could provide CHCs with immediate access to the level of capital needed to invest in the infrastructure needed to compete. Vertical integration also provides access to other important resources and systems that are necessary to support managing risk, such as staff training and management information. Vertical integration with an academic medical center could enhance the CHCs capacity to recruit and retain primary care

[7] This CHC sponsored network could then negotiate with one or two hospitals and other providers to complete the system and offer the full range of health care services. While hospitals and other providers might participate in the system, the integrated delivery network would be sponsored and directed by the CHCs.

physicians because of the improved access to academic roles including the possibility of faculty appointments, and research and training grants

On the other hand, for CHCs, a vertical integration approach could involve the potential of the loss of focus on the particular needs of their respective communities The importance of an individual CHC to a hospital or delivery system lies ultimately in the number of covered lives it serves. An individual CHC might lack leverage within the hospital or system organization to receive sufficient funds or other resources necessary to meet the needs of its neighborhood Also there is a possibility that the weaker CHCs will not be approached for participation in a vertical network so that all CHCs may not have this alternative.

- Combined Horizontal and Vertical Integration

Combining both horizontal and vertical approaches offers the best of both strategies. Several CHCs could combine horizontally and then negotiate with hospitals that are building vertically integrated delivery systems. The selected hospital should have the financial resources to assist the CHCs in improving their facilities, developing systems and recruiting and retaining physicians. The collective volume of patient services should be sufficient to assure that the collective CHCs achieve leverage within the combined organization. The number of combined health centers necessary to produce this leverage will be less than that which would be necessary if the CHCs attempted to sponsor their own delivery system and therefore more easily achieved The resulting delivery system would not be entirely focused on inner city neighborhoods and thereby avoid the associated risk. Furthermore, the combination of CHCs lowers the probability that the financially weaker CHCs will be left without a system partner.

Recommendations

VI. Boston community health centers should be encouraged to pursue horizontal integration strategies
   - In order to increase their future viability, CHCs' should form organizations or networks with at least 100,000 to 120,000 visits annually.
   - Combining several individual health center organizations will enhance their ability to
     - Preserve their mission
     - Recruit and retain management staff and primary care providers
     - Acquire and utilize management information systems
     - Raise capital for facility improvements
     - Capture available economies of scale
     - Negotiate with health plans and hospitals

VII. The Boston Teaching Hospitals and Community Health Centers should be encouraged to create vertically integrated health delivery systems

- By joining an integrated delivery system, CHCs will enhance their access to capital and managed care contracts and expertise
- By investing in CHCs, hospitals can strengthen their primary care base and contribute to the health needs of the community
- When joining an integrated delivery system, the CHCs must be assured that they will be able to sustain their mission
- Specific alignments and arrangements between hospitals and CHCs should be determined by free-market negotiations. Areas of negotiation should include:
  - Governance structure and board representation
  - Specific guaranteed levels of investment (capital improvements, operating subsidies, information systems, physician support, managerial support, etc.)
  - Methods of evaluating performance across the network
  - Discussions of the financial status and future strategy of both organizations

VI. Public Health Findings and Recommendations

The Commission examined data on the public health needs in Boston, reviewed issues related to the coordination of public health services and considered how the city public health functions should relate to Boston City Hospital.

Health Status of Boston Neighborhoods

The Commission examined existing data regarding the health status of Boston residents including:

- Preventable Hospitalizations
  - State Rate Setting Commission analysis of hospitalizations considered preventable if adequate ambulatory care had been delivered. Conducted for 25 diagnoses.

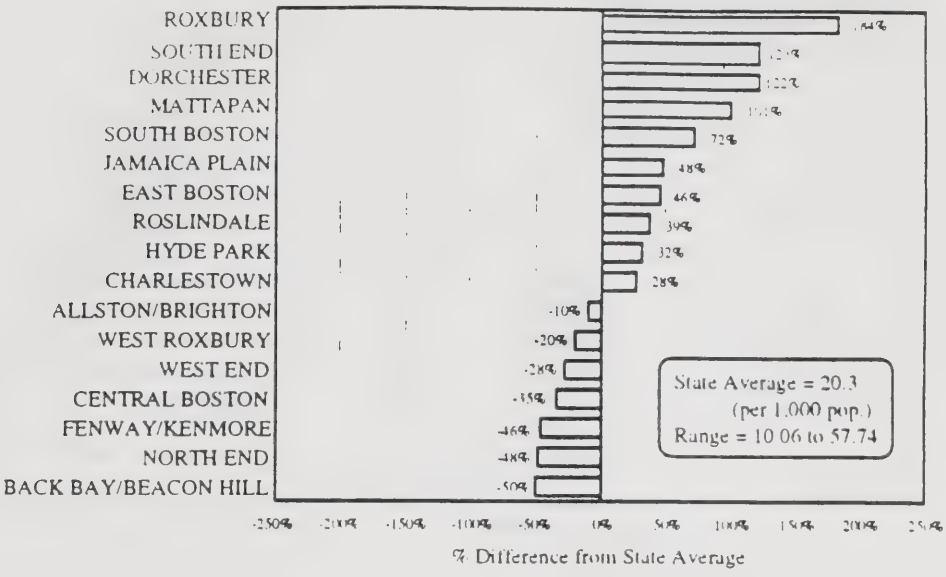
- Perinatal Indicators
  - Mothers not receiving necessary care in the first trimester
  - Infant mortality

- Death Rates
  - AIDS/HIV
  - Alcohol/Substance Abuse
  - Lung Cancer
  - Breast Cancer.

Using these indicators as well as poverty rates, the Commission team reviewed the health status of the Boston neighborhoods. In many of Boston's neighborhoods poor health status persists. In particular, Roxbury, South End, North Dorchester and Mattapan have the lowest health status of all neighborhoods of Boston. Roxbury has the highest poverty rate and the highest rate of preventable hospitalizations - nearly three times the state-wide average. Roxbury also ranks among the top three communities for infant mortality, lack of prenatal care and HIV/AIDS deaths. The South End has the highest HIV/AIDS and substance abuse death rates. North Dorchester ranks highest in the lack of prenatal care - nearly 4 5 times the state average. North Dorchester also ranks third in preventable hospitalizations. Mattapan has the highest infant mortality rate and ranks second in the lack of prenatal care.

Boston Health Status Indicators

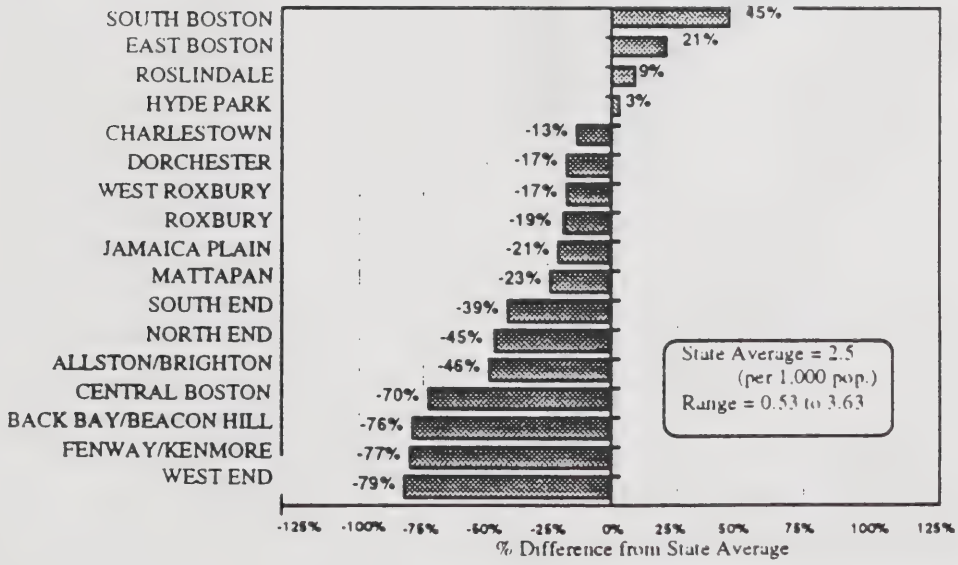
Total Preventable Hospitalizations for Boston 1989-1990



Source: Rate Setting Commission, Bureau of Ambulatory Care

Boston Health Status Indicators

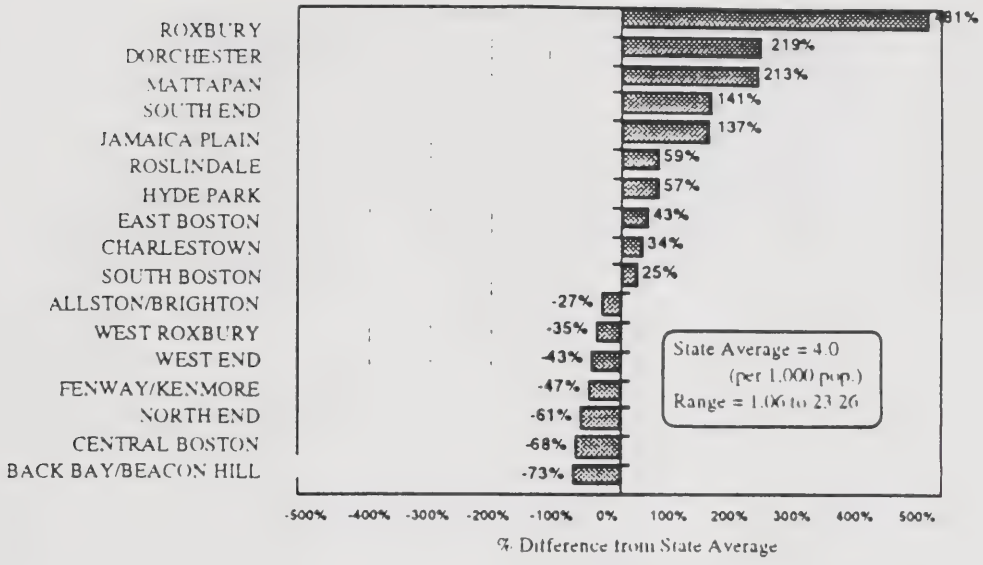
Preventable Hospitalization: Angina 1989-1990



Source: Rate Setting Commission, Bureau of Ambulatory Care

Boston Health Status Indicators

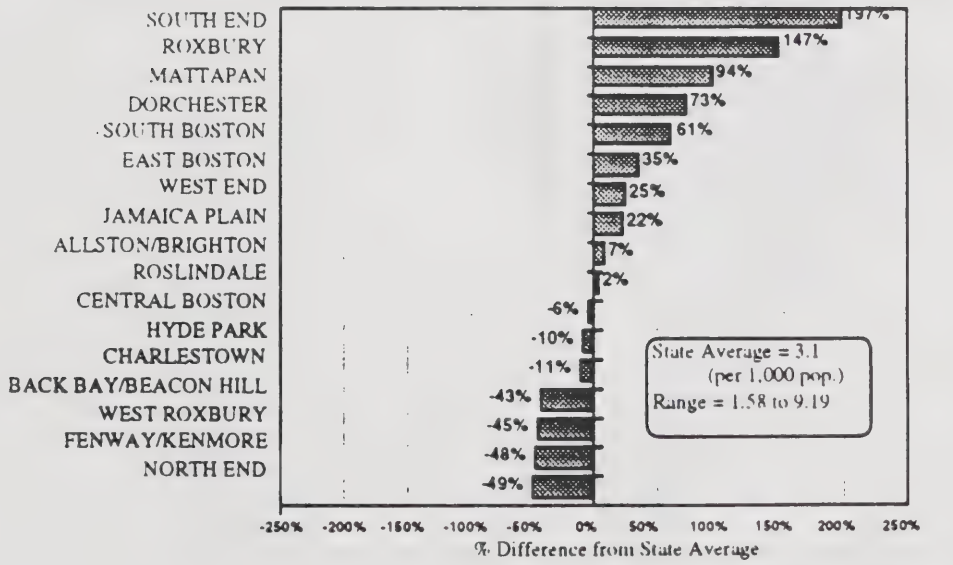
Preventable Hospitalization: Asthma 1989-1990



Source: Rate Setting Commission, Bureau of Ambulatory Care

Boston Health Status Indicators

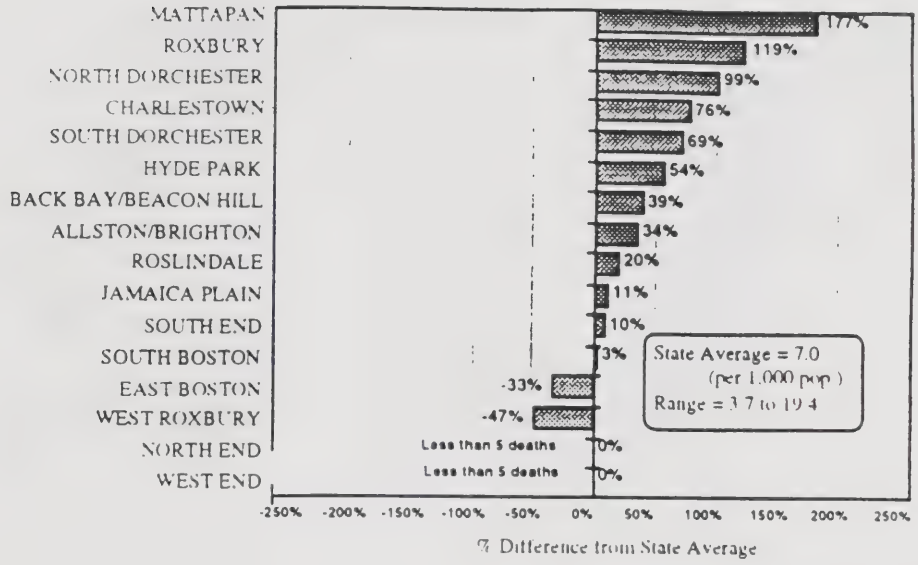
Preventable Hospitalization: Bacterial Pneumonia 1989-1990



Source: Rate Setting Commission, Bureau of Ambulatory Care

Boston Health Status Indicators

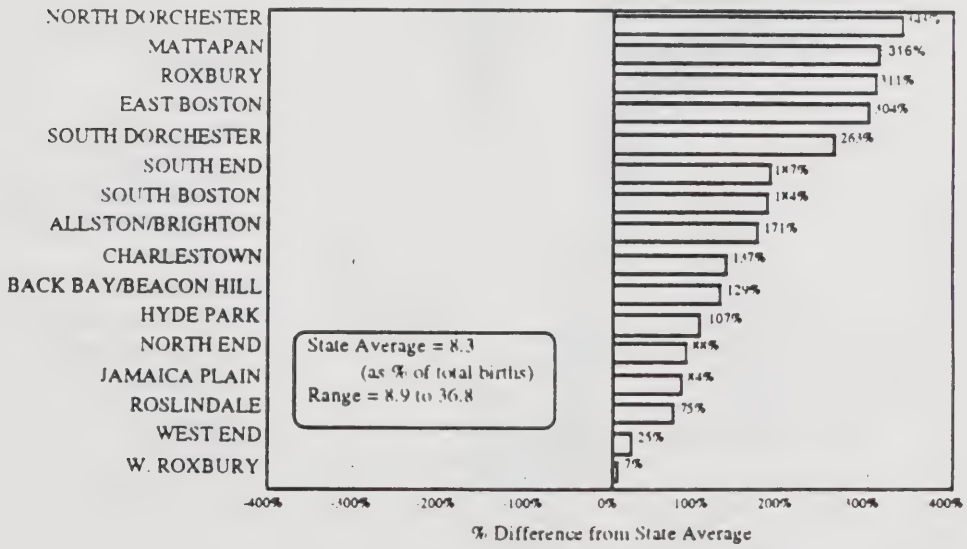
Infant Mortality Rate 1987-1991



Source: Dept. of Public Health, Bureau of Health Statistics and Boston DH&H, Office of Health & Vital Statistics

Boston Health Status Indicators

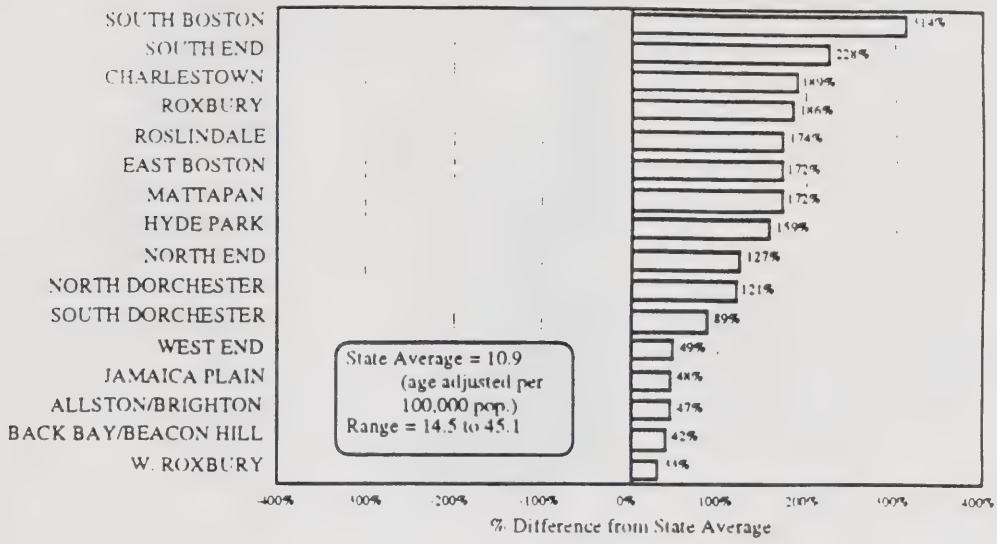
Mothers Not Receiving Prenatal Care in 1st Trimester 1987-1991



Source: Dept. of Public Health, Bureau of Health Statistics and Boston DH&H, Office of Health & Vital Statistics

Boston Health Status Indicators

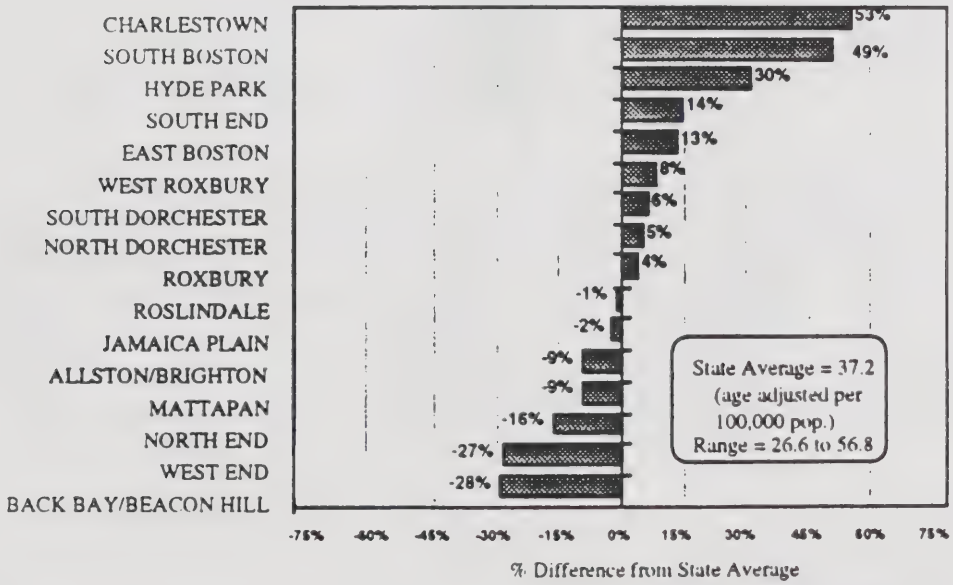
Alcohol & Other Substance Abuse Death Rate 1987-1991



Source: Dept. of Public Health, Bureau of Health Statistics and Boston DH&H, Office of Health & Vital Statistics

Boston Health Status Indicators

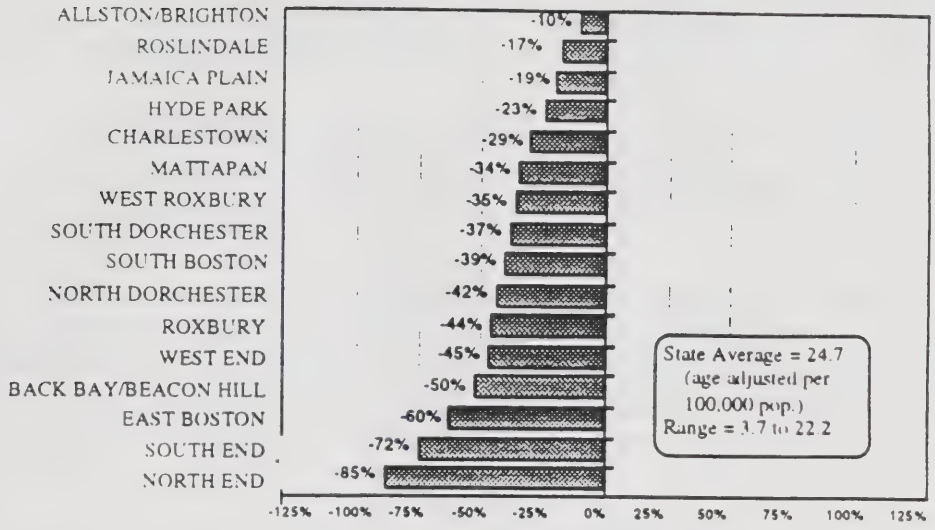
Lung Cancer Death Rate 1987-1991



Source: Dept. of Public Health, Bureau of Health Statistics and Boston DH&H, Office of Health & Vital Statistics

Boston Health Status Indicators

Breast Cancer Death Rate 1987-1991



Source: Dept. of Public Health, Bureau of Health Statistics and Boston DH&H, Office of Health & Vital Statistics

At the same time, residents of these neighborhoods appear to use average, or for inpatient services, above average levels of health care services. The inpatient utilization rate for inner Boston is 1195 days per thousand - 36% above the state wide average. The estimated ambulatory utilization rates for inner Boston neighborhoods approach the rates of utilization experienced nationally.[8] Based on this analysis, Boston does not appear to have a major shortage of health services in the aggregate. However, there may be issues around outreach and education and the organization and distribution of services.

Poor health status cannot be attributed to the failings of the public or private health care systems alone. Factors such as poverty, individual behavior and lack of access to health insurance also have strong impacts. These other factors are often beyond the control of local public health officials and individual providers. While access to insurance may be improved through health reform, there will still remain barriers to improved health status for many people. However, given the volume of quality health services available in Boston, the health status in many city neighborhoods is unacceptably low.

[8] The methodology used in estimating ambulatory utilization in Boston includes only visits from the top ten zip codes at health centers and outpatient departments and excludes visits to private offices and health plan ambulatory centers. Therefore, the total utilization is underestimated.

Coordination of Public Health Services

The persistence of poor health status in Boston's neighborhoods provides a strong impetus to considering how to improve the public health care system Two relatively new developments provide opportunities for such improvements They are

- The development of neighborhood level health status indicators
- The demonstrated and potential impact of coordinated action and networks of public health care providers

Other than the preventable hospitalization data, which were developed by the state Rate Setting Commission, the health status indicators used by the Commission were provided by the Department of Health and Hospitals. DH&H's data resources are very strong. The analysis and reporting of information on the health of the city is a critical function of Boston's Public Health Department and should continue to be developed.

The DH&H has begun to utilize these resources in developing funding and programmatic priorities. The Commission believes that this approach should be continued and expanded. Many federal, state and local public health grant programs are distributed based upon historical allocations. Current priorities may suggest reallocation. Many programs also have limited means to measure the performance of specific programs and providers. In the past, the lack of available data made it difficult to revise funding priorities and measure performance. The continuing development of public health information sources at the neighborhood level provides the opportunity to improve both.

The problems of coordination and communication within the area of public health can be daunting. With federal, state, and local governments funding programs and with private and foundation resources being utilized to provide services, public health services can easily evolve into an illogical mosaic of services which poorly match the needs of the community. Better coordination of public health services is necessary to avoid that result.

The Infant Mortality Task Force was formed in the late 1980s to address the unacceptable levels of infant mortality in Boston neighborhoods. The Task Force included representatives of the entire public health and medical community Through this coordinated effort, providers shared information, were made more aware of the issues of prenatal care and infant mortality and new programs were developed throughout the city. Recent data on infant mortality suggests that these efforts were successful in beginning to address this major health problem. Last summer, the state Department of Public Health issued its Community Health Network Area (CHNA) RFP which combined and coordinated a host of categorical grant programs. The intent was to facilitate coordination among providers and the creation of networks among providers. The CHNAs concept is very promising. While the state treats the entire

city as on CHNA's region, a neighborhood specific approach of this type could be effective

There is a tremendous amount of information now available about the health of Boston's neighborhoods There is also a wealth of expertise in the Boston hospitals, health centers and other provider and consumer groups regarding how to improve the health of Boston's residents However, information about health needs and resources targeted to address them is currently fragmented and not available in such a way as to facilitate the identification of gaps in services. There is also no forum for health care providers and consumers to jointly review these needs and develop new strategies to address them. The Commission feels strongly that the creation of a sustained process to focus on the health of Boston's neighborhoods is critical to maximize the impact of current and future efforts to improve the health of the city. More resources alone will not solve the problem without true collaboration among health care providers, consumers and purchasers.

Relation of Public Health Functions to Boston City Hospital

The Commission's recommendation for a change in the governance structure of BCH highlights the issue of governance for the public health functions of DH&H. Decisions need to be made as to which programs currently in the Department of Public Health should move to a new governance structure along with BCH and which should remain in a city department.

The direction of and accountability for public health in the city is a government function. As an agency of government, the public health department must be concerned with the public health of all residents of the city, with providing the necessary services as efficiently and effectively as possible. Increasingly, the city public health functions are provided by contract with numerous private agencies and community groups including neighborhood health centers and hospitals. Public health officials must determine which agency or provider offers the best service at the lowest price.

Combining public health functions with BCH provides a significant competitive asset to BCH which could play an important role in its long term viability. Public health functions provide contacts with patients and providers which could lead to attracting both to join the BCH health care delivery network. Public health activities such as education and outreach will become increasingly important to providers in a managed care environment. Separating BCH from public health could result in the loss of these assets and make the challenge for BCH management even greater.

The Commission believes that each of the many DH&H public health programs should be reviewed in depth to determine whether they best serve their purpose in a city public health department or with BCH under a new governance structure.

Recommendations

IX. Accountability for the public health functions currently within the Department of Health and Hospitals should be retained as the responsibility of Boston City Government. Public Health programs presently conducted by the Department of Health and Hospitals should be individually evaluated to determine whether they remain within city government or are transferred to the authority/public benefit corporation/not-for-profit organization recommended for Boston City Hospital. The implications of both options should be analyzed. The decision will be determined based on which option assures the maximum benefit and services for the residents of Boston and the people served by its health system.

X. The Public Health Department should establish funding priorities which reflect the neighborhood health status and:

- Leverage the resources of state, federal, foundation and other private programs
- Foster cooperative efforts which draw upon the expertise and resources in Boston hospitals and community providers
- Measure and reward performance by public health providers and networks

XI. A Boston Health Planning Committee should be established by the proposed Mayor's Cabinet Office of Health and Human Services to increase coordination and monitor progress of efforts to improve the health status of Boston residents.

- The Committee should be structured to facilitate a sustained collaborative focus on the major health needs of Boston residents and to encourage ongoing coordination among providers and funding sources in addressing those needs.
- The Committee's membership should include representatives of:– hospitals, medical schools, CHCs, health plans, other community organizations, consumers, public health departments, and foundations